

### SECTION 1: Identification

#### 1.1. Product identifier

Product form : Mixture  
 Trade name : DS 104 - Heavy Duty Phosphoric Acid Detergent  
 Product group : Trade product

#### 1.2. Recommended use and restrictions on use

Recommended uses and restrictions : Cleaning and stain removal  
 Recommended use : Washing and cleaning products (including solvent based products)

#### 1.3. Supplier

##### Manufacturer

AxSys Direct Manufacturing  
 4523 97 Street  
 T6E 5Y8 Edmonton, AB - Canada  
 T 780-436-2606 - F 780-434-5904

#### 1.4. Emergency telephone number

Emergency number : FOR EMERGENCIES INVOLVING DANGEROUS GOODS CALL CANUTEC'S 24HR NUMBER  
 613-996-6666

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS-CA)

Skin corrosion/irritation, Category 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage.
Full text of H statements : see section 16		

#### 2.2. GHS Label elements, including precautionary statements

##### GHS-CA labelling

Hazard pictograms (GHS-CA) :



Signal word (GHS-CA) : Danger

Hazard statements (GHS-CA) :

H314 - Causes severe skin burns and eye damage.

Precautionary statements (GHS-CA) :

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
 P264 - Wash hands, forearms and face thoroughly after handling.  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
 P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
 P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .  
 P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 - Immediately call a POISON CENTER or doctor.  
 P321 - Specific treatment (see supplemental first aid instruction on this label)

# DS 104 - Heavy Duty Phosphoric Acid Detergent

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

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P363 - Wash contaminated clothing before reuse.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS-CA)

No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

# DS 104 - Heavy Duty Phosphoric Acid Detergent

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### 3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS-CA)
phosphoric acid, conc=85%	acide orthophosphorique, conc=85% / acide phosphorique, conc=85% / acide phosphorique, normal, conc=85% / acide phosphorique, ordinaire, conc=85% / acido ortofosforico, conc=85% / ácido ortofosfórico, conc=85% / ácido ortofósforico, conc=85% / orthofosforzuur, conc=85% / orthophosphoric acid, conc=85% / Orthophosphorsäure, Konz=85% / orthophosphorsyre, konc=85% / ortofosforihappo, kons=85% / ortofosforsyra, konc=85% / Phosphorsyrup, Konz=85% / phosphoric syrup, conc=85% / phosphorsyre, konc=85% / Thermische Phosphorsäure, Konz=85%	CAS-No.: 7664-38-2	25 – 35	Skin Corr. 1B, H314

# DS 104 - Heavy Duty Phosphoric Acid Detergent

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

citric acid	citric acid 1,2,3- propanetricarboxy lic acid, 2- hydroxy- / 1,2,3- propanetricarboxy lic acid, 2- hydroxy-, anhydrous / 2- hydroxy-1,2,3- propanetricarbolic acid / 2-hydroxy- 1,2,3- propanetricarboxy lic acid / 2- hydroxy-1,2,3- propanetricarboxy lic acid, anhydrous / acide bêta-hydroxy- bêta- carboxyglutarique / acide bêta- hydroxypropane alpha,bêta,gamm a-tricarboxylique / acide bêta- hydroxytricarboxyl ique / acide du 2- hydroxy-1,2,3- propane tricarboxylique / aciletten / anhydrous citric acid / beta- hydroxytricarballyl ic acid / beta- hydroxytricarballyl ic acid, anhydrous / beta- hydroxytricarboxyl ic acid / citretten / citric acid / citric acid anhydrous fine granular 16/40 / citric acid anhydrous granular / citric acid anhydrous granular 5N / citric acid anhydrous medium granular / citric acid anhydrous powder / citro / citroenzuur, anhydraat /	CAS-No.: 77-92-9	5 – 10	Not classified
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# DS 104 - Heavy Duty Phosphoric Acid Detergent

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS-CA)
	Citronensäure / Citronensäure, wasserfrei / E 330 / E330 / FEMA no 2306 / hydroxytricarballylic acid / MC-1, acidic membrane cleaner / NSC 30279			

Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.
First-aid measures general	: Call a physician immediately.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

#### 4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment	: Treat symptomatically.
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### SECTION 5: Fire-fighting measures

#### 5.1. Suitable extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
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#### 5.2. Unsuitable extinguishing media

No additional information available

#### 5.3. Specific hazards arising from the hazardous product

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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#### 5.4. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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# DS 104 - Heavy Duty Phosphoric Acid Detergent

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

#### 6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.  
Other information : Dispose of materials or solid residues at an authorized site.

#### 6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.  
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

##### Hand protection:

Protective gloves

##### Eye protection:

Safety glasses

##### Skin and body protection:

Wear suitable protective clothing

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

# DS 104 - Heavy Duty Phosphoric Acid Detergent

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: Colourless
Odour	: Odourless
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: None under recommended storage and handling conditions (see section 7).
Incompatible materials	: No additional information available
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hardening time:	: No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

# DS 104 - Heavy Duty Phosphoric Acid Detergent

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

citric acid (77-92-9)	
LD50 oral	5400 mg/kg bodyweight (Equivalent or similar to OECD 401, Mouse, Male/female, Experimental value)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male/female, Experimental value)
ATE CA (oral)	5400 mg/kg bodyweight
Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Before neutralisation, the product may represent a danger to aquatic organisms.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

phosphoric acid, conc=85% (7664-38-2)	
LC50 - Fish [1]	138 mg/l (Pisces)
citric acid (77-92-9)	
LC50 - Fish [1]	440 – 760 mg/l (Equivalent or similar to OECD 203, 48 h, Leuciscus idus, Static system, Fresh water, Experimental value)
BCF - Other aquatic organisms [1]	3.2 (Other, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	-1.8 – -1.55 (Experimental value)

### 12.2. Persistence and degradability

phosphoric acid, conc=85% (7664-38-2)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
citric acid (77-92-9)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.42 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	0.728 g O <sub>2</sub> /g substance



# DS 104 - Heavy Duty Phosphoric Acid Detergent

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

citric acid (77-92-9)	
ThOD	0.686 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.89 (20 day(s), Literature study)

### 12.3. Bioaccumulative potential

phosphoric acid, conc=85% (7664-38-2)	
Bioaccumulative potential	Does not contain bioaccumulative component(s).

citric acid (77-92-9)	
Bioaccumulative potential	Not bioaccumulative.
BCF - Other aquatic organisms [1]	3.2 (Other, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	-1.8 – -1.55 (Experimental value)

### 12.4. Mobility in soil

phosphoric acid, conc=85% (7664-38-2)	
Ecology - soil	No (test)data on mobility of the component(s) available.

citric acid (77-92-9)	
Ecology - soil	No (test)data on mobility of the substance available.
Partition coefficient n-octanol/water (Log Pow)	-1.8 – -1.55 (Experimental value)

### 12.5. Other adverse effects

Ozone : Not classified

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

### 14.1. UN number

UN-No. (TDG) : UN1805  
DOT NA no. : Not applicable  
UN-No. (IMDG) : 1805  
UN-No. (IATA) : Not applicable

### 14.2. UN proper shipping name

Proper Shipping Name (TDG) : PHOSPHORIC ACID, LIQUID  
Proper Shipping Name (DOT) : Not applicable  
Proper Shipping Name (IMDG) : PHOSPHORIC ACID SOLUTION  
Proper Shipping Name (IATA) : Not applicable

### 14.3. Transport hazard class(es)

TDG  
Transport hazard class(es) (TDG) : 8  
Hazard labels (TDG) : 8

# DS 104 - Heavy Duty Phosphoric Acid Detergent

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)



### DOT

Transport hazard class(es) (DOT) : Not applicable

### IMDG

Transport hazard class(es) (IMDG) : 8

Danger labels (IMDG) : 8



### IATA

Transport hazard class(es) (IATA) : Not applicable

## 14.4. Packing group

Packing group (TDG) : III

Packing group (DOT) : Not applicable

Packing group (IMDG) : III

Packing group (IATA) : Not applicable

## 14.5. Environmental hazards

Other information : No supplementary information available.

## 14.6. Special precautions for user

### TDG

UN-No. (TDG) : UN1805

Explosive Limit and Limited Quantity Index : 5 L

Excepted quantities (TDG) : E1

Passenger Carrying Road Vehicle or Passenger : 5 L

Carrying Railway Vehicle Index

### DOT

No data available

### IMDG

Special provisions (IMDG) : 223

Limited quantities (IMDG) : 5 L

Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : P001, LP01

IBC packing instructions (IMDG) : IBC03

Tank instructions (IMDG) : T4

Tank special provisions (IMDG) : TP1

EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE

EmS-No. (Spillage) : S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES

Stowage category (IMDG) : A

Properties and observations (IMDG) : Miscible in water. Mildly corrosive to most metals.

### IATA

No data available

# DS 104 - Heavy Duty Phosphoric Acid Detergent

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. National regulations

No additional information available

### 15.2. International regulations

citric acid (77-92-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

## SECTION 16: Other information

### Full text of H-statements:

H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

Safety Data Sheet (SDS), Canada

While the descriptions, data and information contained herein are presented in good faith and believed to be current, it is provided for guidance only. Because there are so many factors that may affect processing, application or other use, we recommended that you perform an assessment to determine the suitability of the product for your particular purpose prior to use. Nothing herein should be interpreted as a recommendation to infringe existing patents or violate any laws or regulations. No warranties of any kind, either expressed or implied, including fitness for a particular purpose, are made regarding the product described. We assume NO responsibility for any injuries sustained from misuse or misapplication of this product or that might be experienced due to inhalation, ingestion, absorption or other contact with this product. In no case shall the descriptions, information or data provided be considered a part of our terms and conditions of sale. Further, the descriptions, data and information furnished hereunder are given gratis. No obligation or liability for the description, data and information given are assumed. All such, it has been given and accepted at your risk.